

Work Order ID 67586

Monday, March 28, 2011 11:41:31 AM



Page 1

Item ID: D3407-043

Accept



Setup Start



Revision ID:

Item Name: Tow Ring

Stop



Start Date: 3/28/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan:



Date: 11-3-08 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D3407	Rev E

100



Large Fab

Large Fab

Memo

0.00

0.00

EL 11-3-08 X8

Large Fab

Weld D3407-3/-5 using welding rod TIG174 as per Dwg D3407 & QSI
004 A/R TIG174 ROD Batch: M101972

110



QC9- Inspect visual per QSI004- Fusion Welds

QC

Quality Control

0.00

Memo

0.00

PCL 11-08-01 _____

120



QC5- Inspect part completeness to step on W/O

QC

Quality Control

0.00

Memo

0.00

S 11-08-01

(X8) _____

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

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Page 2

Item ID: D3407-043

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Start



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Stop



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Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130



Powdercoat

Powder Coating

Operation
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M 115951.

Memo

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

8. BL 11-3-29

8 d M 1103/29

150



Packaging

Packaging

Identify as per dwg & Stock Location: 464

0.00

Memo

0.00

11/3/29 SK 80

W/O:		WORK ORDER CHANGES							
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NOTE: Date & initial all entries

Work Order ID 67586

Monday, March 28, 2011 11:41:31 AM



Page 3

Item ID: D3407-043

Accept



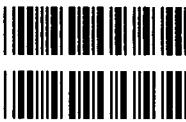
Setup Start



Revision ID:

Item Name: Tow Ring

Stop



Start Date: 3/28/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

160



QC21- Final Inspection - Work Order Release

QC
Quality ControlSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Memo

0.00

W/3/30

MF

11-03-20

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, March 28, 2011 11:41:37 AM

Page 1

Work Order ID: 67586



Parent Item: D3407-043



Parent Item Name: Tow Ring

Start Date: 3/28/2011

Required Date: 3/31/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A□05.10.14□New issue□KJ/EC

IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3407-3		Manufactured	No			100	Each	8.0000	1	8			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

Stem				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA030		8							

D3407-5		Manufactured	No			100	Each	8.0000	1	8			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

Ring				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA030		8							

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EL 11-3-28

8

EL 11-3-28

8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

3

2

1

QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X	X		D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
1	1	1	D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM

SHOP COPY

RETURN TO

ENGINEERING

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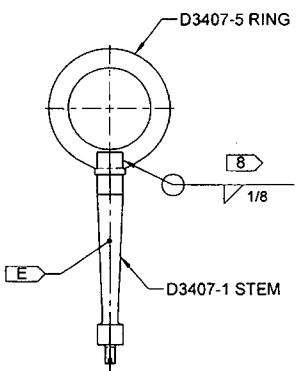
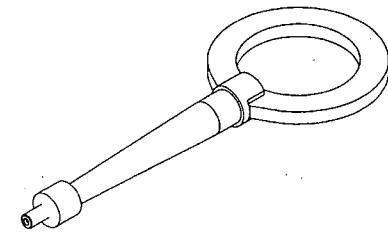
SUBJECT TO AMENDMENT

WITHOUT NOTICE

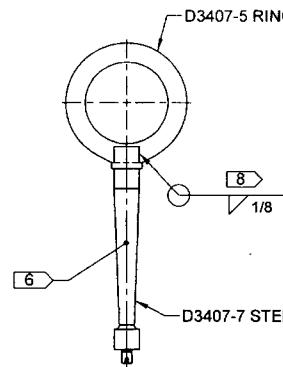
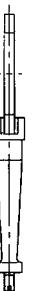
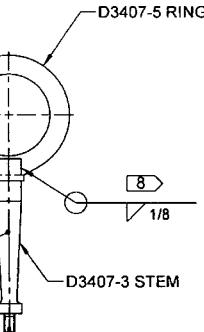
WORK ORDER

NO. 67589

PL 1103-26



D3407-041 TOW RING



D3407-043 TOW RING

D3407-045 TOW RING △

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART PIN "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER △
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT (C2-1) FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT WWASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	JP	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
DATE	08.07.23	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY OTHER PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

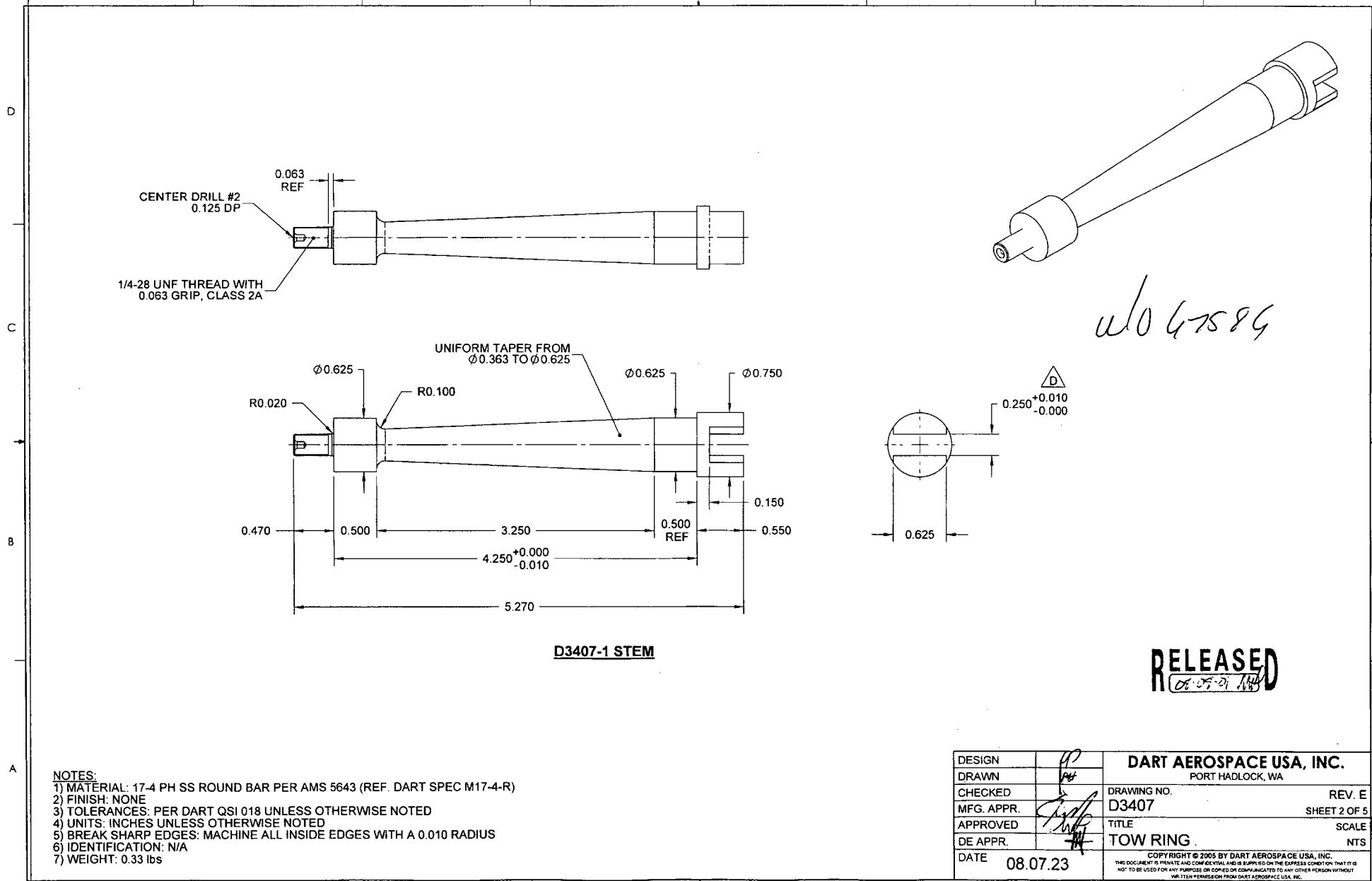
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



DESIGN	<i>99</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>AS</i>	PORT HADLOCK, WA	
CHECKED	<i>JL</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>JL</i>	D3407	SHEET 2 OF 5
APPROVED	<i>JL</i>	TITLE	SCALE
DE APPR.	<i>JL</i>	TOW RING	NTS
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2

D

—
—

The technical drawing shows a center drill with a 1/4-28 UNF thread at the left end. The shank has a diameter of 0.125 DP. A dimension line indicates a length of 0.063 from the end of the shank to a reference point labeled 'REF'. A leader line points to the shank with the text 'CENTER DRILL #2' and '0.125 DP'.

UNIFORM TAPER FROM
Ø0.363 TO Ø0.625

Ø0.625

R0.100

Ø0.625

Ø0.750

0.470

0.250

2.555

3.305 +0.000
-0.010

0.500
REF

0.150

4.325

D3407-3 STEM

46047586

A technical drawing showing a circle with a horizontal dimension line below it. The dimension line has arrows at both ends and the value "0.250" with "+0.00" above and "-0.00" below it. A leader line points from the top right to the center of the circle. Another dimension line at the bottom has arrows at both ends and the value "0.625" with arrows pointing to the left.

B

10

NOTES:

- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.27 lbs

DESIGN	<i>PP</i>	DART AEROSPACE USA, INC.		
DRAWN	<i>PS</i>	PORT HADLOCK, WA		
CHECKED	<i>b</i>	DRAWING NO.	REV. E	
MFG. APPR.	<i>Sig</i>	D3407	SHEET 3 OF 5	
APPROVED	<i>VJH</i>	TITLE	SCALE	
DE APPR.	<i>-</i>	TOW RING	NTS	
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1

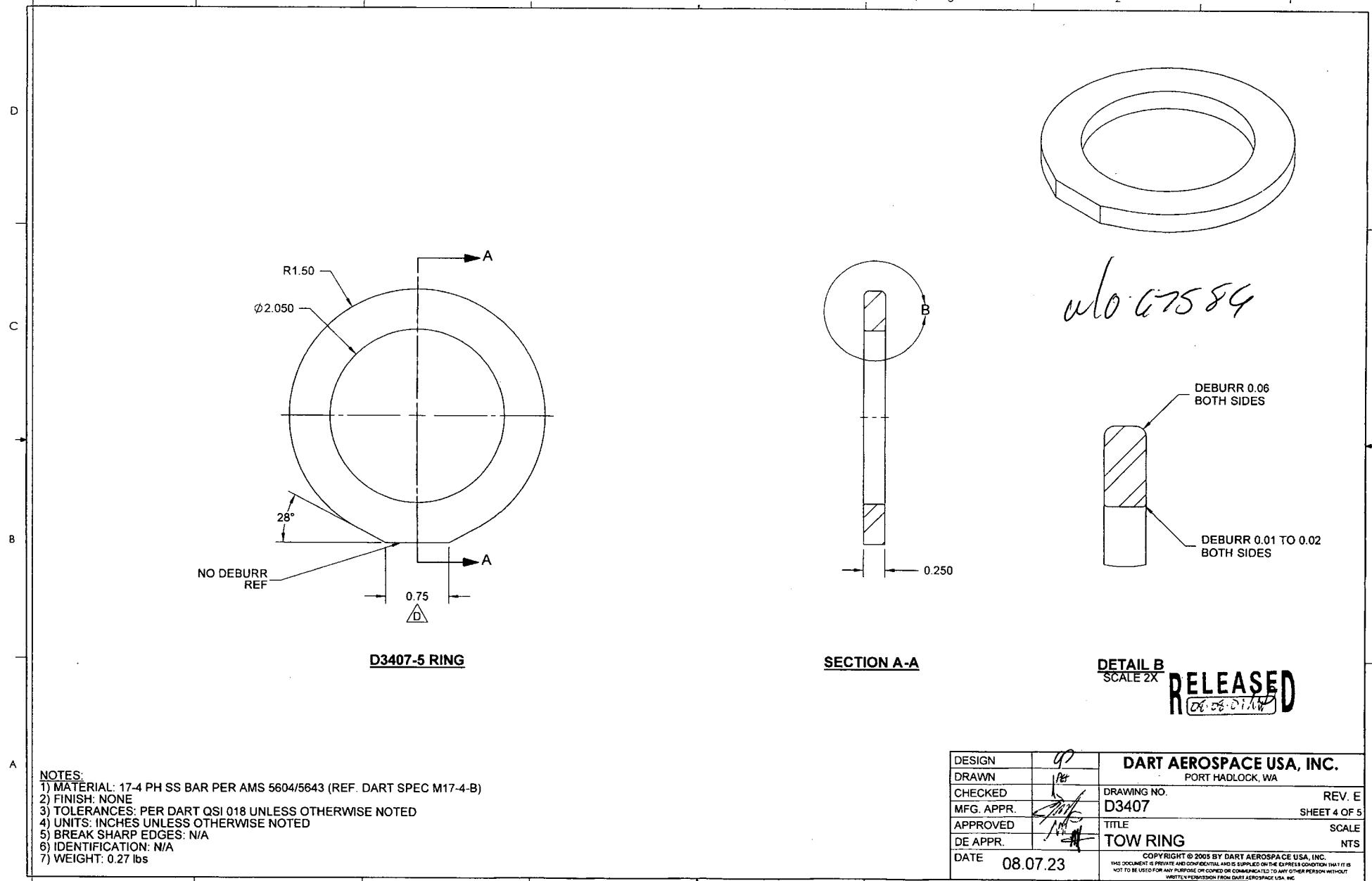
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8 7 6 5 4 3 2 1



DESIGN	9P	DART AEROSPACE USA, INC.
DRAWN	1/2	PORT HADLOCK, WA
CHECKED		DRAWING NO. REV. E
MFG. APPR.		D3407 SHEET 4 OF 5
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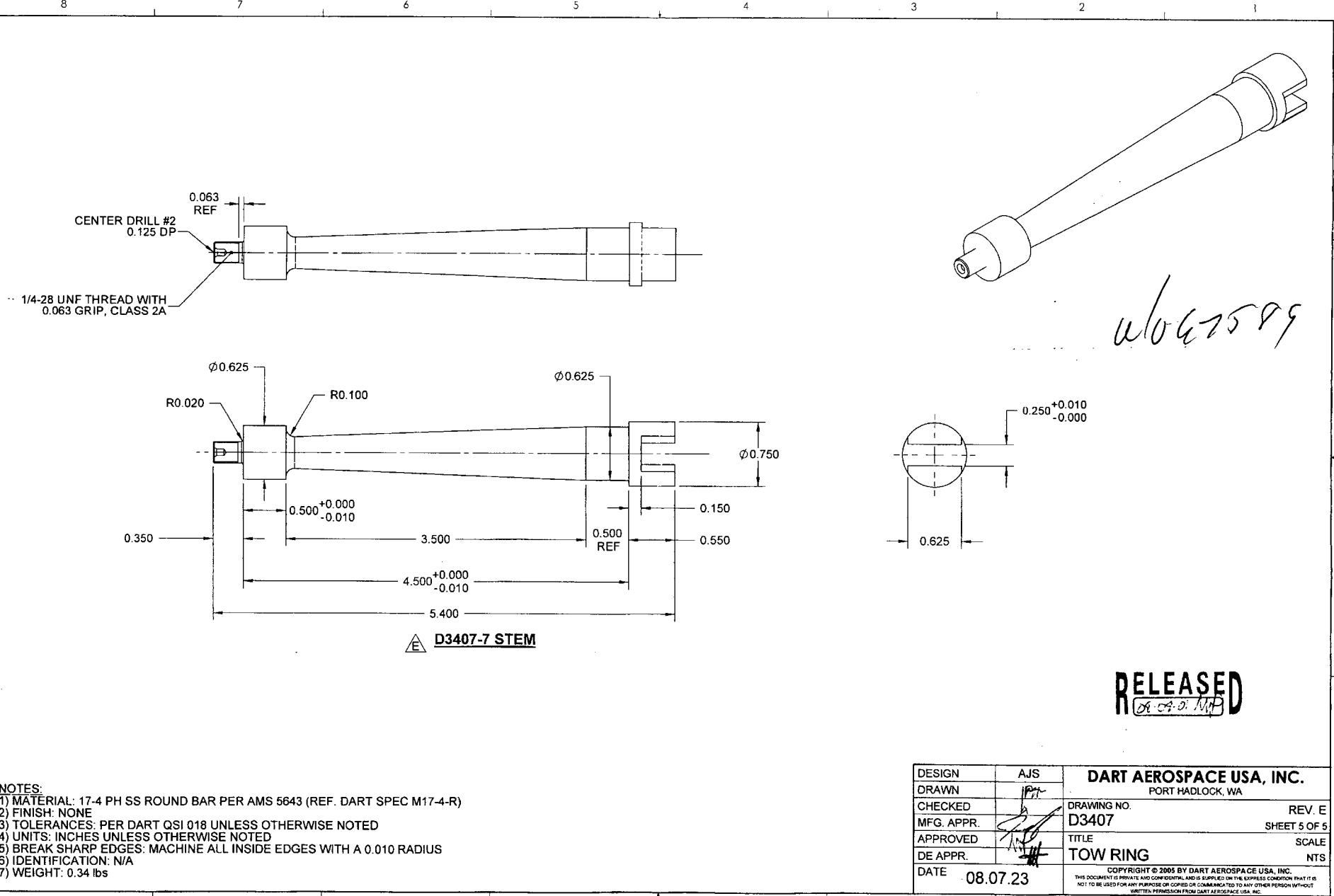
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NOTES:

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 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.34 lbs

DESIGN	AJS	DART AEROSPACE USA, INC.		
DRAWN	<i>[Signature]</i>	PORT HADLOCK, WA		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E	
MFG. APPR.	<i>[Signature]</i>	D3407	SHEET 5 OF 5	
APPROVED	<i>[Signature]</i>	TITLE	SCALE	
DE APPR.	<i>[Signature]</i>	TOW RING	NTS	
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